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Shankar Natarajan

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Weaver Austin Villeneuve & Sampson LLP

P.O. BOX 70250

OAKLAND, CA 94612-0250

EXAMINER

WILSON, ROBERT W

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2419

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/821,285	Applicant(s) NATARAJAN ET AL.	
	Examiner ROBERT W. WILSON	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/3/09 & 2/17/09</u> . | 6) <input type="checkbox"/> Other: _____ |

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-20, 23-25, 27-34, 37-38, & 42-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Liao (U.S. Patent No.: 7,185,081)

Referring to claim 17, Lin teaches: A method for providing dynamic feedback control of network elements in a network including a plurality of network elements each of said network element having a plurality of operating parameters associated with therewith, the data network further comprising a first network portion, the first network portion being administered by a first network service provider, the first network portion including a first plurality of network elements the method comprising (Figures 1 and 4 perform the method) , the method comprising:

Dynamically receiving information related to a first subset of network elements (Communicator per Fig 4 receives information related to 101-104 or first subset of NEs per Fig 1)

Dynamically analyzing at least a portion of said received information based upon selected guidelines to determined whether a perform of a least a portion of said network conforms with a predetermined criteria (Trend Analyzer per Fig 4 analyzes information received from the NEs per Fig 1 based upon guidelines to determine whether parameters have exceed thresholds)

Automatically and dynamically reporting results of said analysis to the administration system for dynamically responding to said results when the perform of the portion of said network fails to conform with a predetermined criteria (Trend Analyzer per Fig 4 reports to Behavior Transition Models of NE's & Network or administration system when a threshold has been exceed by NEs per Fig 1)

Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6)

Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

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Dynamically generating updated element control parameters used to affect at least one aspect of network performance (dynamically determining reconfiguration parameter for NE per col. 7 lines 48 to col. 8 line 3)

Providing at least a portion of said updated element control parameters to said at least one network element (NE is dynamically reconfigured per col. 7 lines 48 to col. 8 line 3)

Automatically and dynamically adjusting at least one associated operating parameter at the at least one network element in response to receiving said updated control parameter (Action Enforcer receives and reconfigures per col. 7 lines 48 to col. 8 line 3)

Lin does not expressly call for: application specific criteria

Liao teaches: application specific criteria (specific application requirements or criteria per col. 2 lines 1 to 15)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the application specific criteria of Liao in place of the predetermined criteria of Lin in order to modify the policies which will result in improved quality of service.

In addition Lin teaches:

Regarding claim 18, wherein the predetermined criteria relates to specified bandwidth use (Network congestion or bandwidth per col. 9 lines 25 to 35)

Regarding claim 19, wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level)

Regarding claim 20, further including modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforce modifies a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 23 wherein said analyzing includes analyzing said information to evaluate a fault management performance of a portion of said network (Trend analyzer per Fig 4 evaluates overload situation or fault associated with NEs per col. 7 line 11)

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Regarding claim 24, further including receiving an event notification message relating to an error reported by a specific network element (Communicator (404) per Fig 4 or first event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 25, wherein said specific network element corresponds to a network element administered by said first service provider (101 is a specific NE which corresponds to NMS associated with first service provider) wherein the method further comprises receiving specific network element an event notification message relating to an adjustment of at least one operating parameter associated with a specific network (Communicator in NE per Fig 4 receives a reconfiguration message per col. 7 lines 45 to 50)

Regarding claim 27 further including reporting said system error to a system administrator of the first network portion (NMS has an inherent system administrator associated with 120 and 101 to 104 per Fig 1)

Regarding claim 28, wherein the network further including a policy engine (Trend Analyzer per Fig 4) having at least one policy for analyzing information from further including modifying a configuration (Action Chooser per Fig 4) of said at least one network element (101 per Fig 1) in response to determination that said service quality of said network portion does not meet at least one aspect of network performance

The method further comprising dynamically modifying said policy in response to a determination that said policy is not effective in affecting said aspect of network performance to conform with said predetermined performance criteria (Action Enforce modifies a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 29, further including reporting a non-effective policy evaluation to the system administrator of the first network portion (NMS reports non-effective policy to inherent system administrator)

Regarding claim 30, further including receiving instructions from said system administrator for modifying said reported policy and dynamically modifying said policy in accordance with said instructions (Action Enforcer receives instructions and modifies per Fig 4)

Referring to claim 31, Lin teaches: a system for providing dynamic feedback control of network elements in a data network, the data network including a plurality of network elements each of the said network elements having a plurality of operating parameters associated therewith the data network further comprising a first network portion the first network portion being administered by a first network service provider, the first network portion including a first plurality of network elements (Figures 1 and 4 are the system), the system comprising:

Means for dynamically receiving information related to a first subset of network elements (Communicator or means per Fig 4 receives information related to 101-104 or first subset of NEs per Fig 1)

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Means for dynamically analyzing at least a portion of said received information based upon selected guidelines to determine whether a perform of a least a portion of said network conforms with a predetermined criteria (Trend Analyzer or means per Fig 4 analyzes information received from the NEs per Fig 1 based upon guidelines to determine whether parameters have exceed thresholds)

Means for automatically and dynamically reporting results of said analysis to the administration system for dynamically responding to said results when the perform of the portion of said network fails to conform with a predetermined criteria (Trend Analyzer or means per Fig 4 reports to Behavior Transition Models of NE's & Network or administration system when a threshold has been exceed by NEs per Fig 1)

Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6)

Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

Means for dynamically generating updated element control parameters used to affect at least one aspect of network performance (Action Chooser or means dynamically determining reconfiguration parameter for NE per col. 7 lines 48 to col. 8 line 3)

Means for Providing at least a portion of said updated element control parameters to said at least one network element (Communicator (404) per Fig 4 or means for providing updated control parameter to NE which is dynamically reconfigured per col. 7 lines 48 to col. 8 line 3)

Means for automatically and dynamically adjusting at least one associated operating parameter at the at least one network element in response to receiving said updated control parameter (Action Enforcer or means automatically and dynamically reconfigures per col. 7 lines 48 to col. 8 line 3)

Lin does not expressly call for: application specific criteria

Liao teaches: application specific criteria (specific application requirements or criteria per col. 2 lines 1 to 15)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the application specific criteria of Liao in place of the predetermined criteria of Lin in order to modify the policies which will result in improved quality of service.

In addition Lin teaches:

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Regarding claim 32, wherein the predetermined criteria relates to specified bandwidth use (Network congestion or bandwidth per col. 9 lines 25 to 35)

Regarding claim 33, wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level)

Regarding claim 34 further including means for modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforce or means for modifying a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 37 wherein said analyzing means includes means for analyzing said information to evaluation fault management performance of a portion of said network (Trend analyzer per Fig 4 overload situation or fault per col. 7 line 11)

Regarding claim 38, further including means for receiving an event notification message relating to an error reported by a specific network element of said plurality of network elements of said first plurality of network elements (Communicator (404) per Fig 4) or means receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 42, wherein the network further including a policy means having at least one policy for analyzing information from selected network elements (Behavior Transition Models of NE's & Network per Fig 4 or means for analyzing NEs per Fig 4) and dynamically generating updated element control parameter used to affect at least one aspect of network performance (Behavior Transition Models of NE's & Network per Fig 4 or means for analyzing NEs and Action chooser updates Fig 4) the system further comprising means for dynamically modifying said policy in response to a determination that said policy is not effective in affecting said aspect or network performance to conform with said predetermined performance criteria (Behavior Transition Model per Fig 4)

Regarding claim 43, further including means for reporting noneffective policy evaluation to the system administrator of the first network portion (NMS provides input to inherent administrator associated when NEs have status per Fig 20)

Regarding claim 44, further including means for receiving instructions from system administrator for modifying reporting policy and means for dynamically modifying said policy in accordance with said instructions Each NE has a Communicator per Fig 4 or means for receiving

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message or instructions from NMS for modifying frequency of reporting and also is configured per message or dynamically modifying policy)

3. Claims 1-6, 9-11, 13-16, & 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) further in view of Liao (U.S. Patent No.: 7,185,081)

Referring to claim 1, Lin teaches: a system for providing dynamic feedback control of network elements in a data network (Figures 1 and 4 are the system) the system comprising:

A plurality of network elements (NEs per Figs 1 and 4 and per col. 2 line 52 to col. 3 line 55), each of the network elements having a plurality of operating parameters (parameters per col. 3 lines 26 to 55) associated therewith

A first network portion, the first network portion (101-104 and 120 per Fig 1)

A first network portion (101-104 and 120 per Fig 1) including a first plurality of network elements (101-104 per Fig 1)

A data store system operable to dynamically receive information related to a first subset of network elements (Communicator (404) per Fig 4 receives information related to 101-104 per Fig 1) said first subset of network elements including at least one network element of the first plurality of network elements (101 to 104 per Fig 1)

A policy engine system operable to dynamically analyze at least a portion of said received information based upon selected guideline to determine whether a perform of at least a portion of said network conforms with a predetermined criteria (Trend Analyzer per Fig 4 analyzes information received based upon guidelines to determine whether parameters have exceed thresholds)

Said policy engine system being further operable to automatically and dynamically report results of said analysis to an administration system for dynamically responding to said results when the performs of the portion of said network fails to conform with the predetermined criteria (Trend Analyzer per Fig 4 or policy engine automatically reports results to Behavior Transition models of NE's and Network per Fig 4 when thresholds relative to performance have been exceeded)

Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6)

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Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

Lin does not expressly call for: network portion being administered by a first network provider

Subramanian teaches: network portion being administered by a first network provider (Networks can be managed utilizing multiple service providers or supervisor per col. 14 lines 32 to 50)

It would have been obvious to add network portion being administered by a first network provider of Subramanian in place of the NMS of Lin in order manage a network by having a different supervisor for each service.

The combination of Lin and Subramanian do not expressly call for: application specific criteria

Liao teaches: application specific criteria (specific application requirements or criteria per col. 2 lines 1 to 15)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the application specific criteria of Liao in place of the predetermined criteria of the combination of Lin and Subramanian in order to modify the policies which will result in improved quality of service.

In addition Lin teaches:

Regarding claim 2, wherein the predetermined criteria relates to specified bandwidth use (Network congestion or bandwidth per col. 9 lines 25 to 35)

Regarding claim 3, wherein the first portion of network elements includes a plurality of telecommunication switches administered by said first network service provider (NEs are routers or switches per col. 3 line 1 managed by NMS associated with first service provider)

Regarding claim 4, wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level)

Regarding claim 5 further including modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforce modifies a NE upon receipt of message from Action Chooser per Fig 4)

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Regarding claim 6, wherein said at least one network element includes at least one network elements of the first plurality of network elements (101 to 104 per Fig 1 includes one NE)

Regarding claim 9 wherein the policy engine system is further operable to analyze said information to evaluate a fault management performance of a portion of said network (Trend analyzer per Fig 4 overload situation or fault per col. 7 line 11)

Regarding claim 10, wherein the policy engine system includes a first event handling component operable to receive an event notification message relating to an error reported by a specific network element (Communicator (404) per Fig 4 or first event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 11, wherein said specific network element corresponds to a network element administered by said first service provider (101 is a specific NE which corresponds to NMS associated with first service provider) wherein the specific network element includes a second event handling component operable to receive an event notification message relating to an adjustment of at least one operating parameter associated with the specific network element (Communicator per Fig 4 or second event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 13, wherein the policy engine is operable to include at least one policy for analyzing information from said first subset of network elements and dynamically generate updated element control parameters used to affect at least one aspect of network performance (Trend analyzer per Fig 4 analyzes SNMP from NEs and Action Chooser generates control parameters per Fig 4)

Regarding claim 14, wherein said at least one network element of the first plurality of network elements is operable to receive at least a portion of said updated element control parameters (Each NE has a Communicator per Fig 4 to receive updated parameters)

Regarding claim 15, wherein said at least one network element is further operable to automatically and dynamically adjust at least one associated operating parameter in response to receiving at least a portion of said updated element control parameters (Action Enforcer in each NE automatically receives and adjusts parameters per Fig 4)

Regarding claim 16, wherein the administration system is operable to dynamically modify said policy in response to a determination that said policy is not effective in affecting said aspect of network performance to conform with said predefined performance criteria (Behavior Transition Models of NE's & Network per Fig 4)

Regarding claim 43, further including means for reporting noneffective policy evaluation to the system administrator of the first network portion (NMS provides input to inherent administrator associated when NEs have status per Fig 20)

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Referring to claim 39, the combination of Lin and Liao teach: the system of claim 38 and wherein said specific network element (101 to 104 per Fig 1) correspond to a specified network element (101 to 104 per Fig 4) and wherein the system further comprises means for receiving at the specific network element an event notification message relating to an adjust of at least one operating parameter associated with the specific network element (Communicator or means per Fig 4 receives)

The combination of Lin and Liao do not expressly call for: network element administered by a first service provider.

Subramanian teaches: network element administered by a first service provider (Networks which have elements can be managed utilizing multiple service providers or supervisor per col. 14 lines 32 to 50)

It would have been obvious to add network element administered by a first service provider of Subramanian in place of the NMS of the combination of Lin and Liao in order manage a network by having a different supervisor for each service.

4. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) in view of Liao (U.S. Patent No.: 7,185,081) further in view of Winokur (U.S. Patent No.: 5,483,637)

Referring to claim 12, the combination of Lin, Subramanian, and Liao teach: the system of claim 10 and analysis error messages associated with network elements

The combination of Lin, Subramanian, and Liao do not expressly call for: suspending analysis in response to reception of an error notification message.

Winokur teaches: suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add suspending analysis in response to reception of an error notification message of Winokur to the system of Lin, Subramanian, and Liao in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

5. Claims 26 and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Liao (U.S. Patent No.: 7,185,081) further in view of Winokur (U.S. Patent No.: 5,483,637)

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Referring to claim 26, the combination of Lin and Liao teach: the method of claim 24 and analysis error messages associated with network elements

The combination of Lin and Liao do not expressly call for: suspending analysis in response to reception of an error notification message.

Winokur teaches: suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add suspending analysis in response to reception of an error notification message of Winokur to the system of the combination of Lin and Liao in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

Referring to claim 40, the combination Lin and Liao teach: the system of claim 38 and analysis error messages associated with network elements

The combination of Lin and Liao do not expressly call for: means for suspending analysis in response to reception of an error notification message.

Winokur teaches: means for suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add means for suspending analysis in response to reception of an error notification message of Winokur to the system of the combination of Lin and Liao in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

In addition Lin teaches:

Regarding claim 41, further including means for reporting said error to a system administrator of the first network portion (Each NE has a Communicator which has means for reporting errors to NMS which has an inherent system administrator per Figs 1 & 4)

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) in view of Liao (U.S. Patent No.: 7,185,081) further in view of Azarni (U.S. Patent No.: 5,905,715)

Referring to claim 7, the combination of Lin, Subramanian, and Liao teach: the system of claim 1 and a portion of said network

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The combination of Lin, Subramanian, and Liao do not expressly call for: operable to analyze said information to determine billing information

Azarni teaches: configured or designed to analyze said information to determine billing information (billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add configured or designed to analyze said information to determining billing information of Azarni to the network management of Lin, Subramanian, and Liao in order to build a system which can provide billing on different services.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) in view of Liao (U.S. Patent No.: 7,185,081) further in view of Ross (GB2318479) (which is an IDS document of record)

Referring to claim 8, the combination of Lin, Subramanian, and Liao teach: the system of claim 1 and policy engine

The combination of Lin, Subramanian, and Liao do not expressly call for: operable to analyze and detect security violations

Ross teaches: configured or designed to analyze and detect security violations (Mgt units or management agents can be utilized to control network security per Pgs 59 to 60 Para 5.2)

It would have been obvious to add configured or designed to analyze and detect security violations of Ross to the network agents of Lin, Subramanian, and Liao in order to build a system which provide network security.

8. Claims 21 & 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Liao (U.S. Patent No.: 7,185,081) in view of Azarni (U.S. Patent No.: 5,905,715)

Referring to claim 21, the combination of Lin and Liao teach: the method of claim 17

The combination of Lin and Liao do not expressly call for: analyze said information to determine billing information

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Azarni teaches: analyze said information to determine billing information (billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add configured or designed to analyze said information to determining billing information of Azarni to the network management of the combination Lin and Liao in order to build a system which can provide billing on different services.

Referring to claim 35, the combination of Lin and Liao teaches: system of claim 31

The combination of Lin and Liao not expressly call for: analyzing means includes means for analyzing said information to determine billing information

Azarni teaches: analyzing means includes means for analyzing said information to determine billing information billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add to analyze said information to means for analyzing billing information of Azarni to the network management of the combination Lin and Liao in order to build a system which can provide billing on different services.

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Liao (U.S. Patent No.: 7,185,081) in view of Winokur (U.S. Patent No.: 5,483,637) in view of Ross (GB2318479) (which is an IDS document of record)

Referring to claim 22, the combination of Lin, Liao, and Winokur teach: the method of claim 26 and a portion of said network

The combination Lin, Liao, and Winokur do not expressly call for: to analyze and detect security violations

Ross teaches: to analyze and detect security violations (Mgt units or management agents can be utilized to control network security per Pgs 59 to 60 Para 5.2)

It would have been obvious to add to analyze and detect security violations of Ross to the network agents of the combination Lin, Liao, and Winokur in order to build a system which provide network security.

10. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) Liao (U.S. Patent No.: 7,185,081) in view of Ross (GB2318479) (which is an IDS document of

Referring to claim 36, the combination Lin and Liao teach: system of claim 31

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The combination of Lin and Liao do not expressly call for: analyzing means includes means for analyzing said information to detect security violations

Ross teaches: analyzing means includes means for analyzing said information to detect security violations per Pgs 59 to 60 Para 5.2)

It would have been obvious to add means includes means for analyzing said information to detect security violations of Ross to the network agents of the combination Lin and Liao in order to build a system which provide network security.

Response to Amendment

11. Applicant's arguments with respect to claims 1-44 have been considered but are moot in view of the new ground(s) of rejection. Also in order to be totally responsive to the amendment it should be noted that the terminal disclaimer has been approved.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT W. WILSON whose telephone number is (571)272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571/272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Robert W Wilson/
Primary Examiner, Art Unit 2419

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